

SERVICE MANUAL

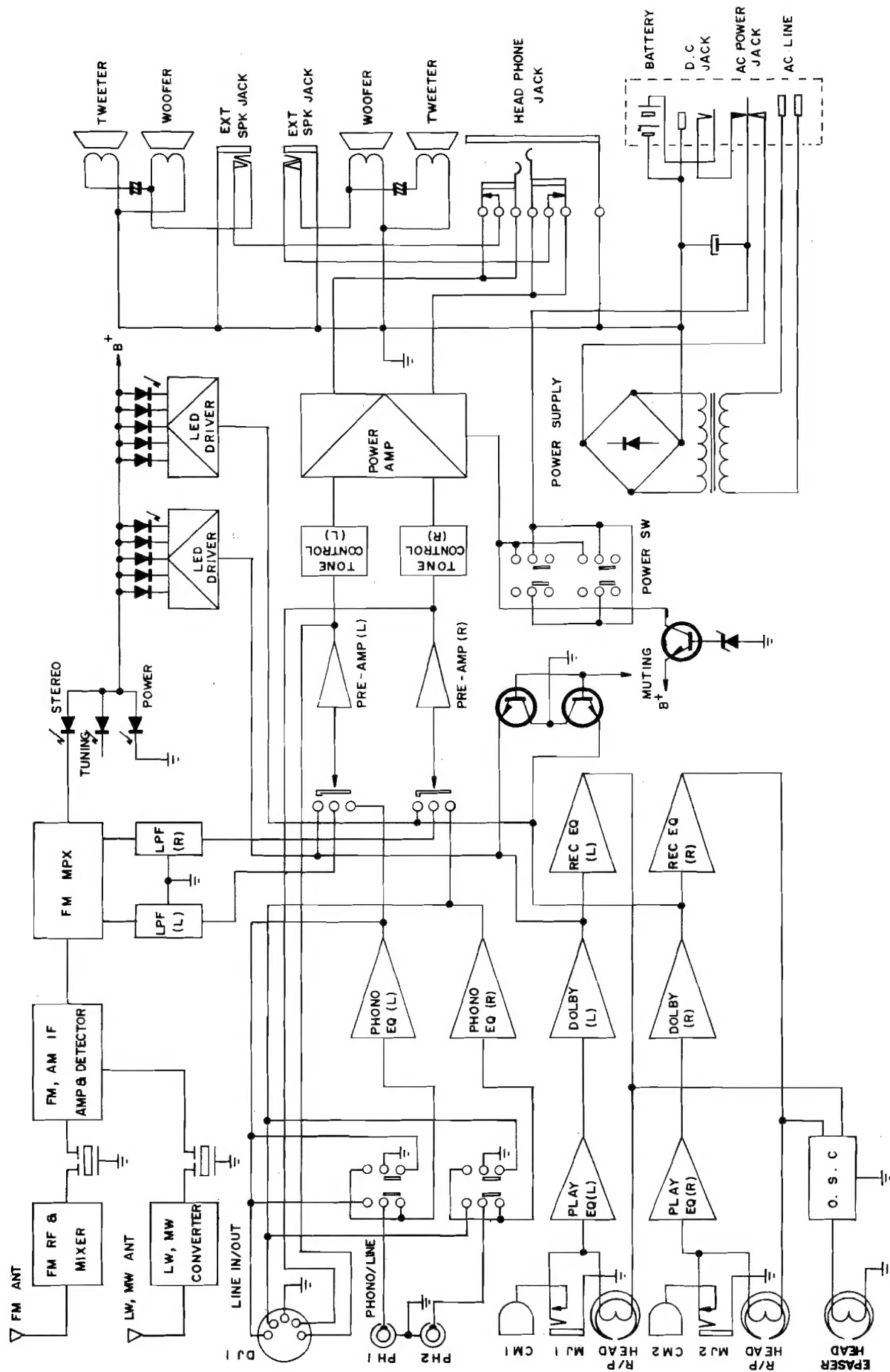
Power Port 2

PORTABLE COMPONENT

UHER Power Port 2

UHER - Servicestelle
Holm GmbH
2 Hamburg 23 - Luisenweg 97
Tel. 040/21 50 71

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ALIGNMENT PROCEDURE

1. AM ALIGNMENT

1-1. MW ALIGNMENT

| Step | Test Stage | Signal Generator | | Receiver | |
|------|--|--|------------------------|------------------|--|
| | | Connect to Receiver | Input Signal Frequency | Dial Setting | Adjustment Point |
| 1 | IF | Sweep generator with marker Gen. coupled through test loop antenna to AM receiving antenna | 455KHz | Low end of dial | IFT T2, T4 |
| 2 | Repeat step 1 until no further improvement can be made. | | | | |
| 3 | Coverage | Same as step 1 | 525KHz | Low end of dial | MW OSC coil L5 |
| | | | 1650KHz | High end of dial | MW OSC trimmer CT5 for SW/MW BAND CT6 for MW/LW BAND |
| 4 | Repeat step 3 until no further improvement can be made. | | | | |
| 5 | Tracking | Same as step 1 | 600KHz | 600KHz | MW antenna coil L1 |
| | | | 1400KHz | 1400KHz | Trimmer CT3 for SW/MW BAND. CT7 for MW/LW BAND |
| 6 | Repeat step 5 to minimize tracking error and also step 4 if necessary. | | | | |

1-2. SW ALIGNMENT

| | | | | | |
|---|--|---|---------|------------------|----------------------------|
| 1 | Coverage | Sweep generator with marker Gen. through a 10PF capacitor to AT1 and ground | 5.8MHz | Low end of dial | SW OSC coil L8 |
| | | | 18.5MHz | High end of dial | Trimmer CT6 on the varicon |
| 2 | Repeat step 1 until no further improvement can be made. | | | | |
| 3 | Tracking | Same as step 1 | 7MHz | 7MHz | SW antenna coil L7 |
| | | | 16MHz | 16MHz | Trimmer CT7 on the varicon |
| 4 | Repeat step 3 to minimize tracking error and also step 1 if necessary. | | | | |

1-3. LW ALIGNMENT

| | | | | | |
|---|--|--|--------|------------------|--------------------|
| 1 | Coverage | Sweep generator with marker generator coupled through test loop antenna to Bar antenna | 145KHz | Low end of dial | LW OSC coil L6 |
| | | | 380KHz | High end of dial | LW OSC Trimmer CT4 |
| 2 | Repeat step 4 until no further improvement can be made. | | | | |
| 3 | Tracking | Same as step 1 | 170KHz | 170KHz | LW antenna coil L2 |
| | | | 320KHz | 320KHz | Trimmer CT7 |
| 4 | Repeat step 3 to minimize tracking error and also step 1 if necessary. | | | | |

2. FM ALIGNMENT

| | | | | | |
|---|---|---|----------|------------------|---|
| 1 | IF | Sweep generator with marker Gen. through 75 ohm Dummy antenna to AT1 and ground | 10.7MHz | Low end of dial | Adjust for max. gain IFT T1. Adjust for min. D/T IFT T2. |
| 2 | Repeat step 1 until no further improvement can be made. | | | | |
| 3 | Coverage | Same as step 1 | 87.5MHz | Low end of dial | Adjust for max. gain FM OSC coil L4 |
| | | | 108.5MHz | High end of dial | Adjust for max. gain Trimmer CT2 on the varicon |
| 4 | Repeat step 3 until no further improvement can be made. | | | | |

| Step | Test Stage | Signal Generator | | Receiver | |
|------|---|--|------------------------|-----------------------------|---|
| | | Connect to Receiver | Input Signal Frequency | Dial Setting | Adjustment Point |
| 5 | Tracking | Same as step 1 | 90MHz | 90MHz | Adjust for max. gain FM RF coil L3 |
| | | | 106MHz | 106MHz | Adjust for max. gain Trimmer CT1 on the varicon |
| 6 | Repeat step 5 until no further improvement can be made. | | | | |
| 7 | Pilot Frequency 19KHz | Signal generator with Stereo Mode and small output to AT1 and ground | 98MHz | 98MHz (Band switch is AUTO) | Adjust for 19KHz ± 30 Hz with frequency counter at TP1 SVR1 |
| 8 | Stereo Separation | Same as step 7, but output is 60 dB | Right channel 98MHz | 98MHz | Adjust for min. R-CH output signal SVR2 |
| | | | Left channel 98MHz | 98MHz | Adjust for min. L-CH output signal SVR2 |
| 9 | Repeat step 8 until no further improvement can be made. | | | | |

3. TAPE ALIGNMENT

○ AZIMUTH ADJUSTMENT

Adjustment screw is located on the left side of R/P Head

- 1) Connect 2CH Voltmeter and Oscilloscope to the tape output terminal of both R channel and L channel.
- 2) Set Tape Selector switch to Normal.
- 3) Play 10KHz Azimuth test tape.
- 4) With a screw driver turn adjustment screw slowly for the max. output of left channel and at the same time both channel have the same phase.
- 5) Seal adjustment screw with Non-hardening cement.

○ PLAY LEVEL ADJUSTMENT

- 1) Connect a voltmeter and an oscilloscope to test point TP9, TP10 and ground.
- 2) Play Dolby level set test tape (MTT150 or equivalent).
- 3) Adjust SVR5 for output 580mV.
- 4) Repeat above steps for the other channel with SVR6.

○ DISPLAY LEVEL LED ADJUSTMENT

- 1) Play under the condition as above Play Level Adjustment .
- 2) Adjust SVR3, so that 4th LED turns on where Dolby mark located.
- 3) Repeat above steps for the other channel with SVR4.

○ BIAS FREQUENCY ADJUSTMENT

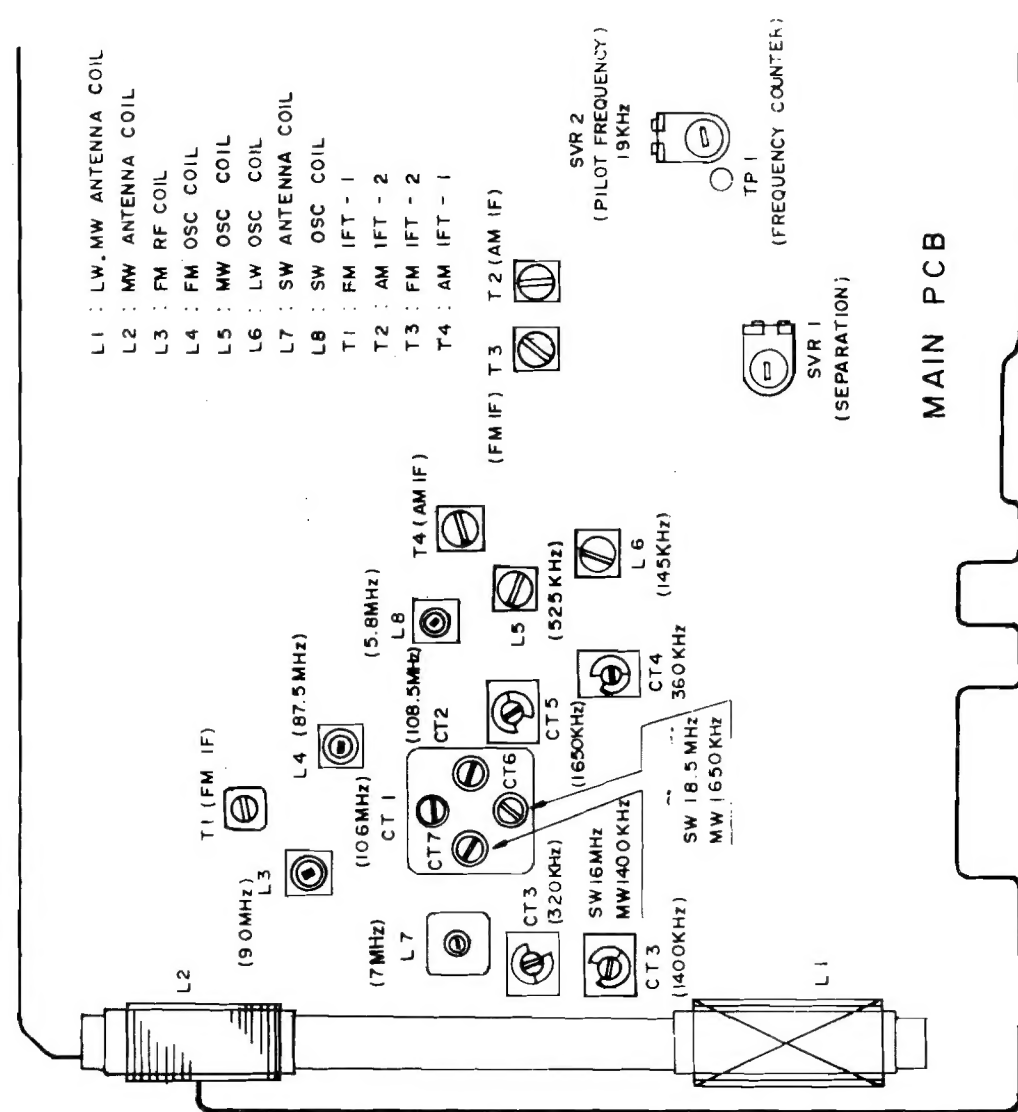
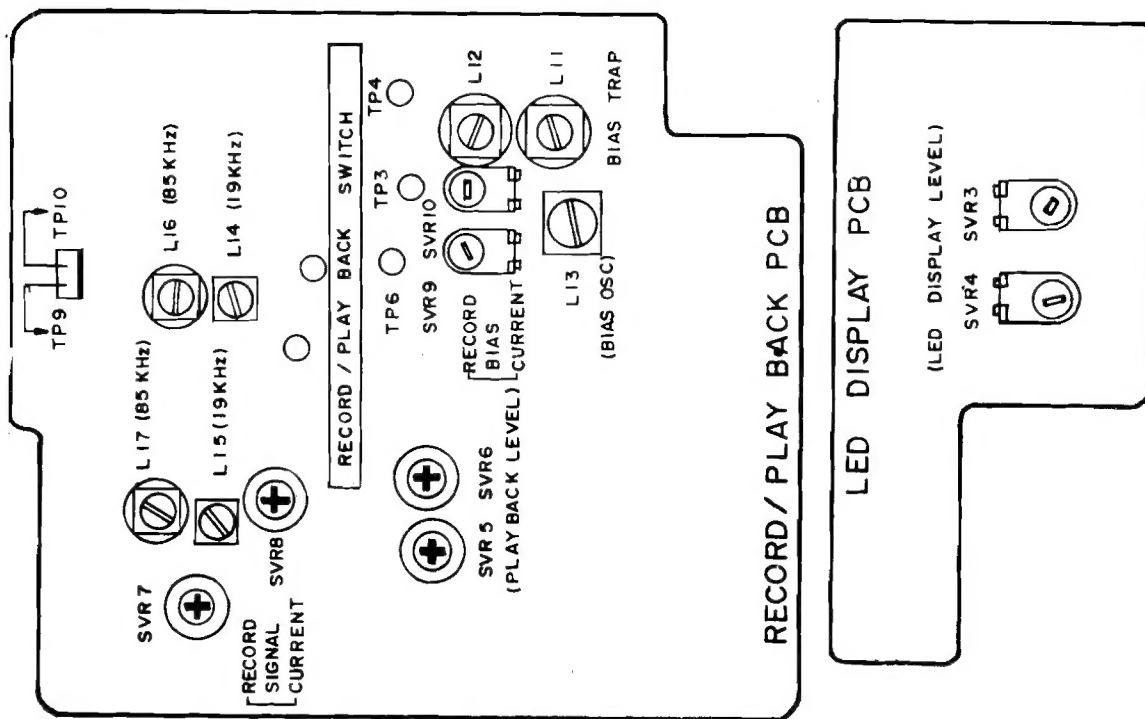
- 1) Input signal is not necessary for this adjustment.
- 2) Connect a Frequency Counter to TP6 and ground.
- 3) Press the Record Button.
- 4) Adjust L13 for a reading of 85KHz on the counter.

○ SIGNAL LEVEL ADJUSTMENT

- 1) Play under the condition as above step 1), 2), 3) of the bias trap coil adjustment.
- 2) Input signal is not necessary for this adjustment.
- 3) Adjust SVR9 for 86mV output.
- 4) Repeat above procedures for the other channel with SVR10.

○ RECORD LEVEL ADJUSTMENT

- 1) Set the selector switch to normal.
- 2) Disconnect the lead fasten connected to the oscillation block.
- 3) Connect a voltmeter and an oscilloscope to TP3, TP4.
- 4) Press the record button.
- 5) Feed 150mV (400Hz) through tape input jacks and adjust the record level control for dolby level.
- 6) Adjust SVR7 for 7mV.
- 7) Repeat above procedures for the other channel with SVR8.



ALIGNMENT LOCATION

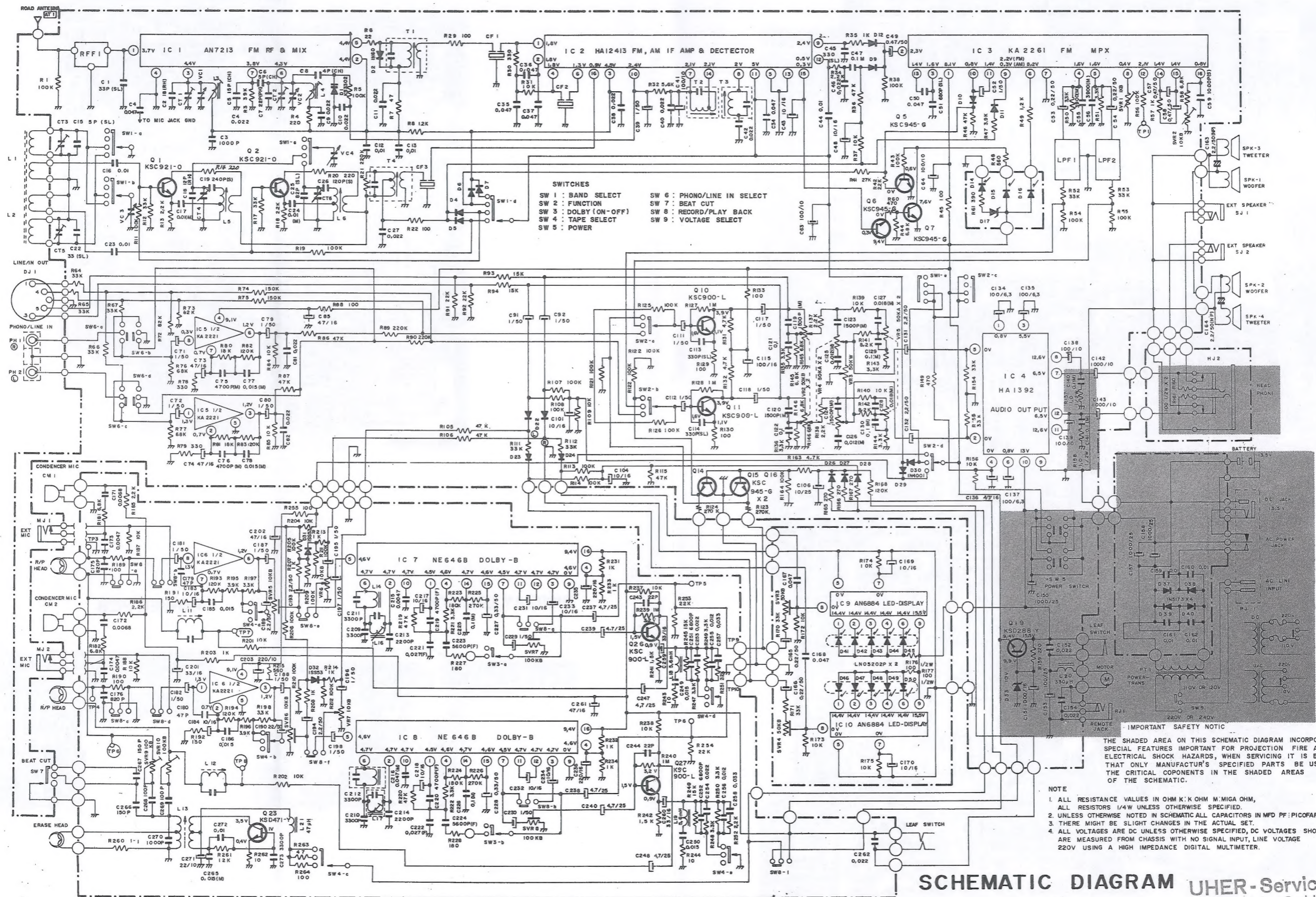
REV-A

3013-509-8108

5013-510-0102

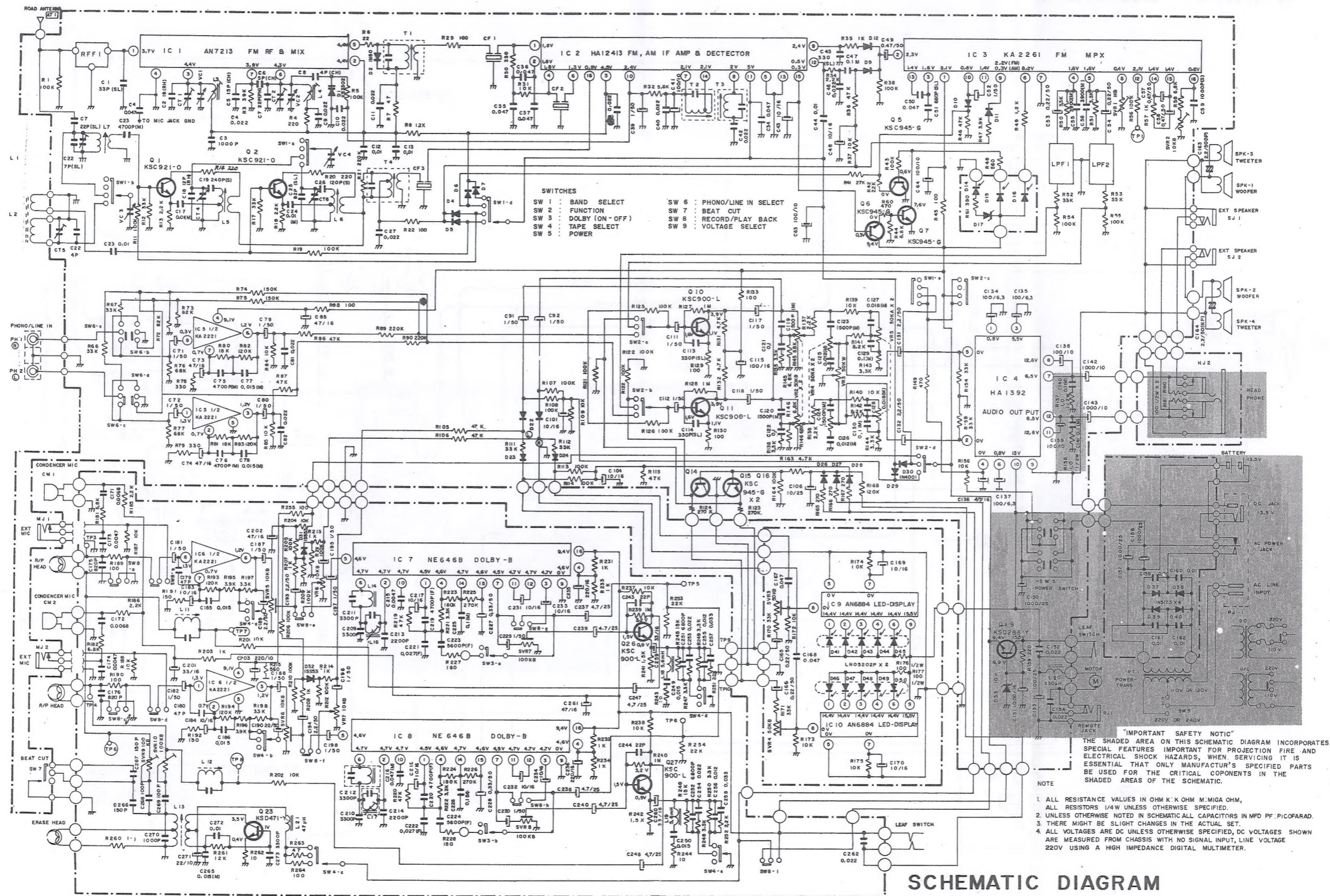
9448

The diagram illustrates the power supply circuitry for a Commodore 64. It features two large electrolytic capacitors, C157 and C158, which are connected to ground. A transformer with a primary winding of 0-250V and secondary windings of 0-9V and 0-150V is used. The 9V secondary is connected to a bridge rectifier composed of four diodes (D51, D52, D53, D54). The positive output of the bridge is connected to a 100μF electrolytic capacitor (C159), which provides the +5V supply to the Commodore 64. The negative output of the bridge is connected to the GND pin of the Commodore 64. The 150V secondary is connected to the AC/DC POWER JACK. The diagram also shows connections to the MAIN PCB and BATTERY.



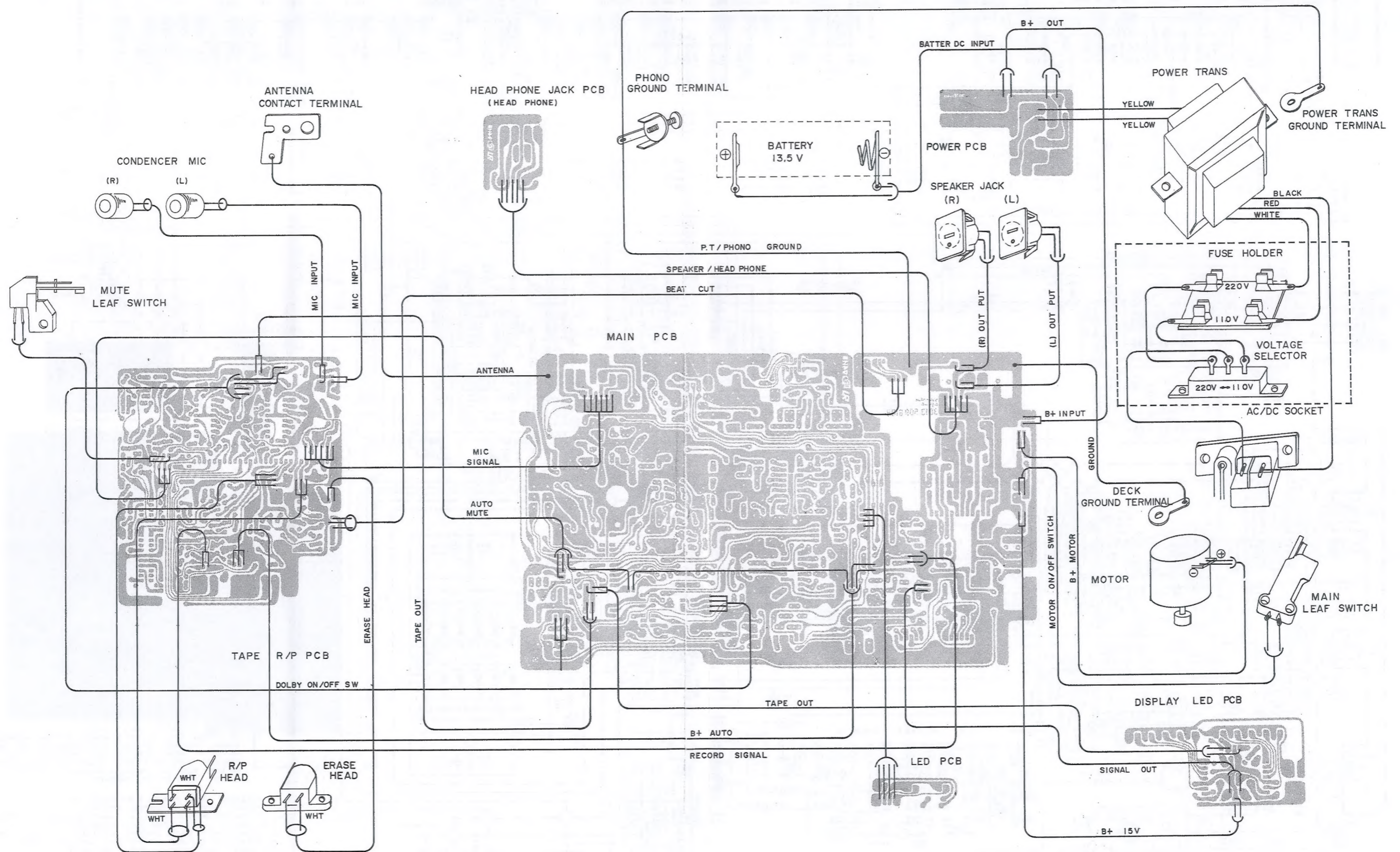
SCHEMATIC DIAGRAM UHER-Servicestelle
 Holm GmbH
 2 Hamburg 28 • Luisenweg 97
 Tel. 040/21 20 71

UHER Popo2

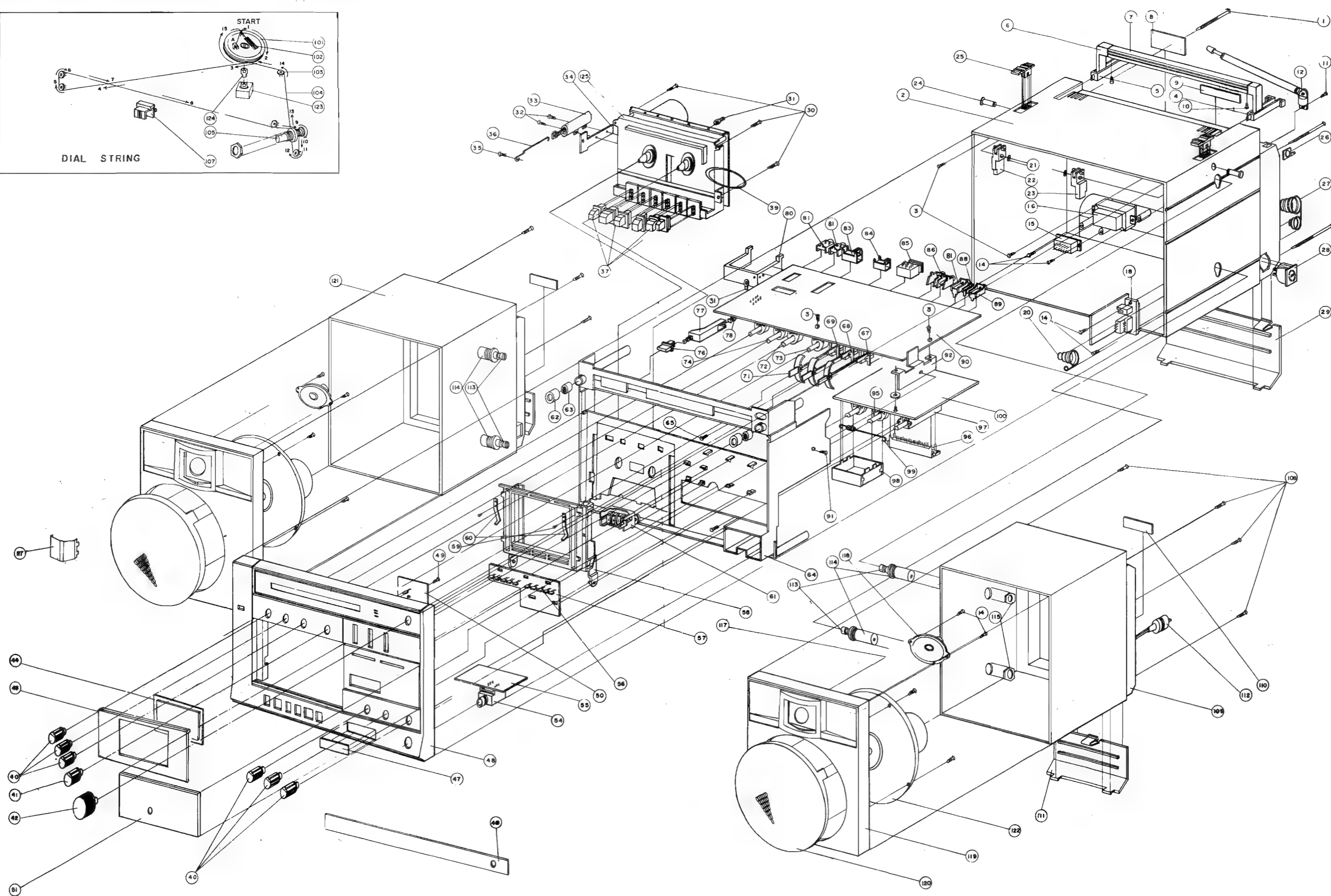
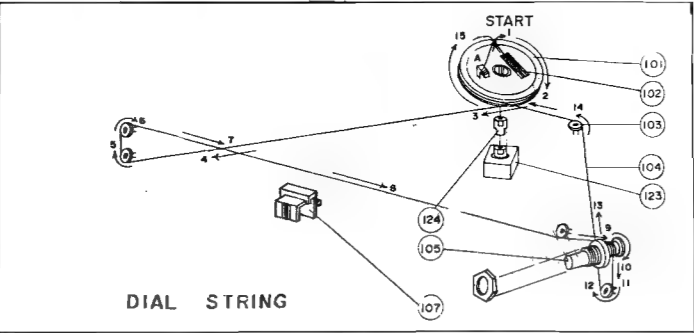


SCHEMATIC DIAGRAM

WIRING DIAGRAM



EXPLODED VIEW AND DIAL STRING



A) ELECTRIC PARTS

| SYMBOL NO. | DESCRIPTION | SPECIFICATION | CODE NO. | Q'TY | REMARK |
|------------------|---------------|-------------------|---------------|------|----------|
| IC1 | IC | AN7213 | 2119-201-2509 | | |
| IC2 | IC | HA12413 | 2119-201-2101 | | |
| IC3 | IC | KA2261 | 2119-201-4606 | | |
| IC4 | IC | HA1392 | 2119-201-3708 | | |
| IC5 | IC | LA3160 | 2119-202-4308 | | |
| IC6 | IC | KA2221 | 2119-201-4800 | | |
| IC7, 8 | IC | NE646B | 2119-203-1005 | | |
| IC9, 10 | IC | AN6884 | 2119-201-2606 | | |
| Q1, 2 | TRANSISTOR | KSC921-O | 2139-301-7309 | | |
| Q5, 6, 7, 14, 15 | TRANSISTOR | KSC945-G | 2139-302-6501 | | |
| Q10, 11 | TRANSISTOR | KSC900-L | 2139-301-6809 | | |
| Q26, 27 | | | | | |
| Q23 | TRANSISTOR | KSD471-Y | 2149-401-1206 | | |
| Q19 | TRANSISTOR | KSD288-Y | 2149-401-2705 | | |
| D1 | DIODE | KS3302 | 2169-501-1603 | | |
| D2 | DIODE | IN60FM | 2169-101-1403 | | |
| D3, 4, 6 | DIODE | ISS53 | 2169-301-2901 | | |
| D9, 10, 11 | | | | | |
| D12, 21, 22 | | | | | |
| D23, 24, 26 | | | | | |
| D27, 28, 29 | | | | | |
| D31, 32 | | | | | |
| D7 | DIODE | IN4001 | 2619-201-0504 | | |
| D8, 17 | DIODE-ZENER | 1W 5.3-6V | 2169-404-1108 | | |
| D14, 16 | LED | SLP151B | 2309-104-1602 | | |
| D15 | LED | SLP251B | 2309-104-1505 | | |
| D13 | DIODE-ZENER | 1W 9.4 ~ 16.6V | 2169-403-2401 | | |
| D37 ~ 40 | DIODE | IN4148 | 2169-201-1305 | | |
| D41 ~ 50 | LED | LN052029 | 2309-117-0102 | | |
| SW1 | SWITCH-LEVER | 00640484 6P-4C, S | 3549-801-0501 | | |
| SW2 | SWITCH-LEVER | 00430540 4C-3P, S | 3549-801-0307 | | |
| SW3 | SWITCH-LEVER | 00220546 2C-2P | 3549-801-0404 | | |
| SW4 | SWITCH-ROTARY | SRZ-S063 6C-3P | 3509-201-2604 | | |
| SW5 | SWITCH-PUSH | SLP-E-12 4C-2P | 3529-203-6503 | | |
| SW6 | SWITCH-SLIDE | 00420159 4C-2P | 3519-930-2709 | | |
| SW7 | SWITCH-SLIDE | 001301011C-3P | 3519-930-1607 | | |
| SW8 | SWITCH-SLIDE | CL109K 9C-2P | 3519-201-0900 | | |
| SW9 | SWITCH-SLIDE | 00120141 1C-2P | 3599-501-0208 | | 110/220V |
| VR2 | VR-DOUBLE | K16J-003D 50KBx2 | 1219-811-0302 | | |
| VR3 | VR-SINGLE | K161A-OG26 50KW | 1219-805-0109 | | |
| VR4, 5 | VR-DOUBLE | K162V-0015 50KAx2 | 1219-804-0203 | | |
| VR6, 7 | VR-SINGLE | K161A00-10KB | 1209-109-0404 | | |
| SVR1 | VR-SEMI | TR24R B1K | 1249-104-0302 | | |
| SVR2 | VR-SEMI | TR24R B10K | 1249-104-0108 | | |
| SVR3, 4 | VR-SEMI | TR24R B50K | 1249-104-0205 | | |

| SYMBOL NO. | DESCRIPTION | SPECIFICATION | CODE NO. | Q'TY | REMARK |
|-----------------|--------------------|--------------------------------|---------------|------|----------|
| SVR5, 6 | SR-SEMI | SR19R B10K | 1249-102-0306 | | |
| SVR7, 8 | SR-SEMI | SR19R B100K | 1249-102-0704 | | |
| SVR9, 10 | SR-SEMI | SR19R B220K | 1249-102-0908 | | |
| CM1, 2 | MICROPHONE | KUC-1523-01-024 | 4219-102-0401 | | |
| MJ1, 2 | JACK-EARPHONE | 3.5PI (HLJ0491-01-010) | 3333-510-1106 | | |
| SJ3, 4 | JACK-DIN 29 | TCS9001-01-1011 | 3339-551-0304 | | |
| SJ1, 2 | JACK-EARPHONE | 3.5PI (HLJ0491-01-010) | 3333-510-1106 | | RCA TYPE |
| SJ1, 2 | JACK-DIN SP | TCS9004-01-1011 | 3333-510-1407 | | DIN TYPE |
| RJ1 | JACK-REMOTE | 2.5PI (HSJ0492-01-010) | 3333-510-2101 | | |
| HJ1, 2 | JACK-HEADPHONE | HLJ0306-01-040 | 3339-521-0602 | | |
| PJ1 | SOCKET 2P SW (CP) | HSC0426-01-210 | 3354-500-3102 | | CP TYPE |
| PJ1 | SOCKET 2P SW (EP) | HSC0426-01-020 | 3353-101-1102 | | EP TYPE |
| DJ1 | JACK-DIN | TCS4451-01-1011 | 3339-551-0100 | | DIN TYPE |
| PH1, 2 | JACK-RCA 1P | S155B (1P) | 3339-524-0504 | | RCA TYPE |
| PH1, 2 | JACK-DIN | TCS4451-01-1011 | 3339-551-0100 | | DIN TYPE |
| | POWER CORD AC | KP419-C, KS-15 CP | 3053-808-5107 | | CP TYPE |
| | POWER CORD | KP-10, KS-18 SPT-1 | 3053-807-6109 | | EP TYPE |
| | POWER CORD AC | KP560, KS15, UFSA-2 | 3059-808-0405 | | AP TYPE |
| | CORD-SPK W/PLUG | V/O.16 300V 1100MM | 3054-400-4109 | | |
| | CORD-SPK W/PLUG | 1007 #24 1100MM | 3054-400-4206 | | |
| | TRANS-POWER | EI57 110/220V 50/60Hz | 2869-200-1109 | | CANADA |
| | TRANS-POWER | EI57 220V 50Hz VDE | 2869-200-1206 | | EUR |
| | TRANS-POWER | EI57 240V 50Hz BS | 2869-200-1303 | | BS |
| | TRANS-POWER | EI57 110/220V 50/60Hz | 2869-200-1400 | | EX Etc |
| | TRANS-POWER | EI57 110/220V 50/60Hz | 2869-200-1604 | | U.S.A |
| F1 | FUSE-W/LEAD | 125/250V 4A 31.8-L | 4709-131-3008 | | CANADA |
| CF1, 2 | FILTER-CERAMIC | SFE-10.7MA5 | 4529-303-0619 | | |
| CF3 | FILTER-CERAMIC | SFU 455B | 4529-315-0102 | | |
| LPF1, 2 | FILTER-LOWPASS | B3AN 0701-32 | 4529-505-2109 | | |
| RFF1 | COIL-BANDPASS | BPME1 | 2489-003-0103 | | |
| SPEAKER1, 2 | SPEAKER-WOOFER | 1212A 120MM 40HM 6W | 4209-125-2009 | | |
| SPK3, 4 | SPEAKER-TWEETER | 4T02A 40MM 40HM 6W | 4209-401-0312 | | |
| L1 | COIL-BAR ANT MW | 32 CORE 120HM 350μH 71.6 | 2509-309-5106 | | SW BAND |
| L1 + L2 | COIL-BAR ANT MW/LW | 9132 CORE 120MH 350μH/3.5MH | 2509-608-2105 | | LW BAND |
| L3 | COIL | 0.5PIx1.99T | 2539-022-0100 | | |
| L4 | COIL-FM OSC | 7MM | 2519-108-2105 | | |
| L5 | COIL-SEVEN, CAN | 200μH A-BASE F MW RED | 2619-010-7022 | | |
| L6 | COIL-SEVEN, CAN | 780μH A-BASE F LW GRN | 2619-012-7152 | | LW BAND |
| L7 | COIL-ANT, SW | 9.5M/M | 2509-805-0201 | | SW BAND |
| L8 | COIL-SEVEN, CAN | 2.5μH A-BASE FSW BLK | 2619-014-8205 | | |
| L11, 12, 14, 15 | TRANS | FB-9 85B (S-174-O49) | 2429-080-2704 | | |
| L13 | COIL-TEN, CAN | 11MH H-BASE F85K BLK | 2619-584-1406 | | |
| L16, 17 | COIL-SEVEN, CAN | 23MH E-BASE F19K | 2619-055-1809 | | |
| L18, 19 | COIL-CHOKE, RND | 5.6MH-K Q80 F0R252 | 2429-010-2105 | | |
| L20 | COIL-CHOKE, RND | 330μH-K Q80 F1R3 | 2429-010-1100 | | |
| L21 | COIL-CHOKE, RND | 47μH-K Q30 F2R52 | 2429-020-0902 | | |

| SYMBOL NO. | DESCRIPTION | SPECIFICATION | CODE NO. | Q'TY | REMARK |
|----------------|-------------------|-----------------------------|---------------|------|---------|
| T1 | TRANS-IF FM1 | 7M/M CAN | 2739-202-0102 | | |
| T2 | TRANS-IF AM3 | 7M/M CAN | 2749-201-0308 | | |
| T3 | TRANS-SEVEN CAN | 2.2 μ H L-BASE F FM BLU | 2619-133-0665 | | |
| T4 | TRANS-IF AM, A | 7M/M CAN | 2749-202-1306 | | |
| CT3, 4 | C-TRIMMER | 14PF 50V | 1829-508-0308 | | LW BAND |
| CT3, 5 | C-TRIMMER | 14PF 50V | 1829-528-0308 | | SW BAND |
| | VARICON-POLY | 92S-22CNT-A/C | 1819-309-0803 | | |
| | ANTENNA-ROD | 6.5 ϕ 713MM RT-50M | 4509-316-0406 | | |
| R157, 158 | R-CARBON | RD $\frac{1}{2}$ P 1-J | 1018-327-1098 | | |
| R160, 161 | R-CARBON | RD $\frac{1}{2}$ P 100-J | 1018-327-1016 | | |
| C150, 157, 158 | C-POLYSTYRENE | CQ09 S50V 3300-J | 1509-452-2200 | | |
| C211, 212 | | | | | |
| C213, 214 | C-POLYSTYRENE | CQ09 S50V 2200-J | 1509-452-2006 | | |
| C219, 220 | C-POLYPROPYLENE | M50V 4700-F | 1509-331-2701 | | |
| C221, 222 | C-POLYPROPYLENE | M50V 0.027M-F | 1509-331-2905 | | |
| C223, 224 | C-POLYPROPYLENE | M50V 5600-F | 1509-331-2808 | | |
| C225, 226 | C-TANTALUM, SOLID | 35V 0.1M-K | 1629-201-4207 | | |
| C227, 228 | C-TANTALUM, SOLID | 35V 0.33M-K | 1629-201-4304 | | |
| C270 | C-POLYESTER | M200V 0.001M-K | 1509-126-0309 | | |

B) MECHANICAL PARTS

| SYMBOL NO. | DESCRIPTION | SPECIFICATION | CODE NO. | Q'TY | REMARK |
|------------|-------------------|-------------------|---------------|------|--------|
| 1 | SCREW-TAP RH | 1-3x75 FE FZY | 7148-130-7517 | 4 | |
| 2 | CABINET-BACK | HIPS 94HB | 6000-502-6104 | 1 | |
| 3 | SCREW-TAP RH SPEC | 2S-3x8 FE FZY | 7148-530-0819 | 6 | |
| 4 | GUIDE HANDLE L | PE 94HB | 6463-501-4104 | 1 | |
| 5 | GUIDE HANDLE R | PE 94HB | 6463-501-5109 | 1 | |
| 6 | HANDLE BAR | ZNDC CR | 6423-501-1109 | 2 | |
| 7 | HANDLE BEAM | PVC EXTR 94HB | 7664-501-7103 | 1 | |
| 8 | LABEL-RATING MAIN | ALS 0.3T | | 1 | |
| 9 | LABEL-DOLBY | AL FOIL | 8114-538-4103 | 1 | |
| 10 | SCREW-FH | +M3x6 FE FZY | 7018-130-0611 | 2 | |
| 11 | SCREW-RH | +M3x8 FE FZY | 7048-130-0810 | 1 | |
| 12 | ANTENNA-ROD | 65FI 713MM RT-50M | 4509-316-0406 | 1 | |
| 14 | SCREW-TAP RH | 2S-3x8 FE FZY | 7148-530-0819 | 8 | |
| 15 | VOLTAGE-SELECTOR | 00120 141K-29 | 3599-501-0208 | 1 | |
| 16 | TRANS POWER | | | 1 | |
| 18 | AC JACK | HSC0425-01-020 | 3354-500-3102 | 1 | |
| 20 | SPRING-BATTERY | SWP 1.0 ϕ NI | 6674-515-1207 | 1 | |
| 21 | E-RING | STS 2.5 ϕ | 7358-102-5061 | 2 | |
| 22 | LEVER-LOCK SPK L | ABS 94HB | 6463-501-6104 | 1 | |
| 23 | LEVER-LOCK SPK R | ABS 94HB | 6463-501-6201 | 1 | |
| 24 | SHAFT-LOCK | FE NI PLATING | 5104-511-9107 | 4 | |
| 25 | KNOB-LOCK SPK | ABS 94HB | 7624-516-4104 | 2 | |
| 26 | CONTACT-BATTERY | BSP 0.7T FT | 3114-501-5109 | 1 | |

| SYMBOL NO. | DESCRIPTION | SPECIFICATION | CODE NO. | Q'TY | REMARK |
|------------|------------------------|---------------------------|---------------|------|--------|
| 27 | SPRING-BATTERY A | SWP 1.0φNI | 6674-515-1100 | 1 | |
| 28 | JASK-DIN 2P | TCS 9004-01-100 | 3333-510-1407 | 2 | |
| 29 | DOOR-BATTERY | ABS 94HB | 7643-503-7102 | 1 | |
| 30 | SCREW-TAP RH | 2S-3x10 FE FZY | 7148-530-1018 | 2 | |
| 31 | LUG | 0.3T-TE SBC | 3114-102-4208 | 2 | |
| 32 | SCREW RH | +M2.6x6 FE FZY | 7048-126-0613 | 2 | |
| 33 | PARTS FOR TAPE DECK | MECHANISM EJECT HOLDER | 5194-500-2103 | 1 | |
| 34 | BRKT-DAMP | SBHG-1 1.0T | 6614-599-6105 | 1 | |
| 35 | SCREW-TAP RH | 2-2.6x6 FE FZY | 7154-500-2105 | 1 | |
| 36 | LINK-DAMP | SUS 1.0φ | 5264-500-7106 | 1 | |
| 37 | KNOB-CASSETTE | ABS 94HB | 7623-504-3105 | 6 | |
| 39 | BELT COUNTER | CR-WRT | 5274-500-5402 | 1 | |
| 40 | KNOB-TONE | ABS 94HB | 7623-504-7202 | 6 | |
| 41 | KNOB-VR | ABS 94HB | 7623-504-7207 | 1 | |
| 42 | KNOB-TUNING | ABS 94HB | 7623-504-5202 | 1 | |
| 43 | DOOR-CASSETTE | ABS 94HB | 7643-504-9105 | 1 | |
| 44 | WINDOW DOOR | ACRYL SMOKE | 7654-507-7109 | 1 | |
| 46 | DIAL SCALE | ACRYL CLR | | 1 | |
| 47 | BADGE BRAND | ALS 0.3T | | 1 | |
| 48 | CABINET FRONT | HIPS 94HB | | 1 | |
| 49 | SCREW-TAP RH | 2S-3x6 FE FZY | 7148-530-0615 | 1 | |
| 50 | PWB LED | 30x25x1.6T 94HB | | 1 | |
| 51 | WINDOW-LED | ACRYL-2.0T CLR | 7654-537-6102 | 1 | |
| 54 | HEAD PHONE JACK | HLJ 0306-01-040 | 3339-521-0602 | 1 | |
| 55 | PWB-HEAD PHONE | 55x38x1.6T 94HB | | 1 | |
| 56 | LED-METER | LN-052029 | 2309-117-0102 | 2 | |
| 57 | PWB-LED | 93x51x1.6T 94HB | | 1 | |
| 58 | HOLDER-CASSETTE | ABS BLK 94HB | 6602-100-7109 | 1 | |
| 59 | SPRING-TAPE | SUS 0.3T | 6674-515-4105 | 2 | |
| 60 | SCREW-TAP RH | 2S-2x6 FE FZY | 7108-520-0632 | 2 | |
| 61 | COUNTER | SCR300-124 | 4319-007-0109 | 1 | |
| 62 | HOLDER-CON MIC | RUBBER | 6604-514-0107 | 2 | |
| 63 | MICROPHONE | KUC-1523-01-024 | 4219-102-0401 | 2 | |
| 64 | CHASSIS-MAIN | HIPS 94HB | 6020-500-1103 | 1 | |
| 65 | SCREW RH | +M3x8 FE FZY | 7048-110-0810 | 2 | |
| 67 | SWITCH-LEVEL | 00640484 6C-6P | 3549-801-0501 | 1 | |
| 68 | SWITCH-LEVEL | 00430540 4C-3P | 3549-801-0307 | 1 | |
| 69 | SWITCH-LEVEL | 00220546 2C-2P | 3549-801-0404 | 1 | |
| 71 | KNOB LEVER | ABS 94HB | 7624-516-5206 | 3 | |
| 72 | VR-SINGLE | R161A-OG26-50KW | 1219-805-0109 | 1 | |
| 73 | VR-DOUBLE | K162J-002D 50KBx2 | 1219-811-0302 | 1 | |
| 74 | VR-DOUBLE | K162V-0015-50KA-2 | 1219-804-0203 | 2 | |
| 76 | KNOB-POWER | ABS 94HB | 7624-517-5209 | 1 | |
| 77 | LINK POWER | ABS 94HB | 6463-501-3109 | 1 | |
| 78 | SWITCH PUSH | SUF12 4C-2P H:12.5 | 3529-203-6503 | 1 | |
| 80 | HEAT SINK | ALS | 5684-504-5100 | | |
| 81 | JACK EARPHONE | 93.5 (HLU 0491-01-010) | 333-510-1106 | 4 | |
| 83 | SWITCH SLIDE | 00310101, 10-3P | 3519-930-1606 | 1 | |

| SYMBOL NO. | DESCRIPTION | SPECIFICATION | CODE NO. | Q'TY | REMARK |
|------------|---------------------------|-----------------------------|---------------|-------|--------|
| 84 | SWITCH-SLIDE | 00420159, 4C-2P | 3519-930-2709 | 1 | |
| | | | | 1 | |
| 86 | JACK RCA | 1P ASSY | 3339-524-0504 | 2 | |
| 88 | JACK REMOTE | φ2.5 (HSJ 0492-01-010) | 3333-510-2101 | 1 | |
| 90 | MAIN PWB | 330x158x1.6T 94HB | 3013-509-8108 | 1 | |
| 91 | SCREW-TAP RH | 2S-3x8 FE FZY | 7118-230-0817 | 1 | |
| 92 | BRKT PWB (M) | SPC 1.0T FZY | 6624-502-4100 | 1 | |
| 95 | VR SINGLE | K161A 00-10KB | 1209-109-0404 | 2 | |
| 96 | SWITCH-SLIDE | LC109K-9C-2P, S | 3519-201-0900 | 1 | |
| 97 | SWITCH-ROTAY SLIDE | SRZ-S063 6C3P NS | 3509-500-4104 | 1 | |
| 98 | SHIELD-FENCE REC | TE-SBC 0.3T | 6134-500-4104 | 1 | |
| 99 | SPRING-REC L | STS 1.0φ | 6674-516-8108 | 1 | |
| 100 | REC PWB | 125x111x1.6T 94HB | 3013-510-0102 | 1 | |
| 101 | DIAL-DRUM | ABS BLK | 5223-500-5109 | 1 | |
| 102 | SPRING DRUM | SUS 27 φ0.4 | 6674-512-3101 | 1 | |
| 103 | WHEEL DIAL A | PP | 5224-104-7102 | 5 | |
| 104 | DIAL-CORD | φ0.5 KEVLER | 0729-140-2016 | 1.5MT | |
| 105 | SHAFT-TUNING | MBS | 5104-512-0105 | 1 | |
| 106 | | | | | |
| 107 | POINTER | ABS ORANGE | 8004-504-8100 | 1 | |
| 108 | SCREW-TAP PH | 1-3x12 FE FZY | 7108-130-1216 | 8 | |
| 109 | CABINET BACK SPL L | HIPS 94HB | 6001-559-2107 | 1 | |
| 110 | LABEL-RATING SPK | ALS 0.3T | 8034-517-0105 | 2 | |
| 111 | DOOR CORD SPK | ABS 94HB | 7643-503-6107 | 2 | |
| 112 | CORD-SPK W/2P DIN PLUG | 21/0.12 300V 1000MM GRAY | 3054-400-4109 | 2 | |
| 113 | SHAFT LINK SPK | SUM 24LF ZW | 5104-512-4105 | 4 | |
| 114 | HOUSING LOCK SPK | PC | 6814-500-9100 | 4 | |
| 115 | NUT | M12xP1.0 FZ | 7208-121-2102 | 4 | |
| 117 | GRILL-TWEETER | SPC 0.5T | 7714-528-0109 | 2 | |
| 118 | SPEAKER TWEETER | 4T 0.2A 40MM 6W 40HM | 4209-401-0312 | 2 | |
| 119 | CABINET FRONT | HIPS 94HB | 6002-503-2101 | 2 | |
| 120 | GRILL WOOFER | SPC 0.5T | 7713-502-6102 | 2 | |
| 121 | CABINET BACK SPK R | HIPS 94HB | 6001-559-2204 | 1 | |
| 122 | SPEAKER WOOFER | 1212A 120MM 6W 40HM | 4209-125-2009 | 2 | |
| 123 | VARICON-POLY | P2S-22CNT-A/C | 1819-309-0803 | 1 | |
| 124 | SHAFT-VARICON | MBS | 5104-512-5100 | 1 | |
| 125 | DECK ASSY | RF403-14 | 4929-110-0509 | 1 | |

| SYMBOL NO. | DESCRIPTION | SPECIFICATION | CODE NO. | Q'TY | REMARK |
|------------|------------------|---------------|--------------|------|--------|
| 1 | R/P HEAD | 2232007 | 0000-063-001 | 1 | |
| 2 | ERASE HEAD | 88601 | 0000-063-002 | 1 | |
| 3 | C. SPRING | PBE13666 | 0000-063-003 | 1 | |
| 4 | HEAD STAND | PBC1134 | 0000-063-004 | 1 | |
| 5 | SPRING | PBE6163 | 0000-063-005 | 1 | |
| 6 | HEAD BASE | PBC1133 | 0000-063-006 | 1 | |
| 7 | IDLER ASSY | PBE01594 | 0000-063-007 | 1 | |
| 8 | PINCH ARM ASSY | PBE01600 | 0000-063-008 | 1 | |
| 9 | SPRING | PBE6161 | 0000-063-009 | 1 | |
| 10 | WASHER | PGMW16x140020 | 0000-063-010 | 2 | |
| 11 | T. SPRING | PBE6189 | 0000-063-011 | 1 | |
| 12 | S REEL | PBD1622 | 0000-063-012 | 1 | |
| 13 | S BRAKE SPRING | PBE6003 | 0000-063-013 | 1 | |
| 14 | T REEL ASSY | PBE01595 | 0000-063-014 | 1 | |
| 15 | FRICTON PLATE | PBE14729 | 0000-063-015 | 1 | |
| 16 | CLUTCH PLATE | PBE14935 | 0000-063-016 | 1 | |
| 17 | C. SPRING | PBE6184 | 0000-063-017 | 1 | |
| 18 | BUSH | PBE14926 | 0000-063-018 | 10 | |
| 19 | BRAKE | PBD1643 | 0000-063-019 | 1 | |
| 20 | T. SPRING | PBE6017 | 0000-063-020 | 1 | |
| 21 | T. SPRING | PBE13863 | 0000-063-021 | 3 | |
| 22 | PAUSE ARM | PBE14933 | 0000-063-022 | 1 | |
| 23 | CAM LEVER | PBD1642 | 0000-063-023 | 1 | |
| 24 | HOLDER PLATE | PBE14951 | 0000-063-024 | 1 | |
| 25 | STEEL BALL | PBE14460 | 0000-063-025 | 4 | |
| 26 | INTER ROCK PLATE | PBC1132 | 0000-063-026 | 1 | |
| 27 | BUSH | PBE14923 | 0000-063-027 | 3 | |
| 28 | IDLER GEAR | PBE14939 | 0000-063-028 | 1 | |
| 29 | CASSETTE HOLDER | PBE14956 | 0000-063-029 | 2 | |
| 30 | LATCH LEVER | PBD1721 | 0000-063-030 | 1 | |
| 31 | TUBE | PBE15318 | 0000-063-031 | 1 | |
| 32 | CHASSIS OS | PBC0780 | 0000-063-032 | 1 | |
| 33 | BUTTON SHAFT | PBE14928 | 0000-063-033 | 1 | |

| SYMBOL NO. | DESCRIPTION | SPECIFICATION | CODE NO. | Q'TY | REMARK |
|------------|------------------------|---------------|--------------|------|--------|
| 34 | BUTTON LEVER | PBE2954 | 0000-063-034 | 6 | |
| 35 | BUTTON FRAME | PBD1722 | 0000-063-035 | 1 | |
| 36 | SPRING | PBE6167 | 0000-063-036 | 1 | |
| 37 | LEAF SWITCH | MSW1353 | 0000-063-037 | 1 | |
| 38 | T, SPRING | PBE6191 | 0000-063-038 | 1 | |
| 51 | MOTOR | EG510ED2B2 | 0000-063-051 | 1 | |
| 52 | PULLEY | PBE14937 | 0000-063-052 | 1 | |
| 53 | SKELETON SWITCH | QAS1129A | 0000-063-053 | 1 | |
| 55 | HOLDER | PBD1659 | 0000-063-055 | 1 | |
| 56 | CAPS, TAN SUPPORT | PBE14994 | 0000-063-056 | 1 | |
| 57 | WORM | PBD1644 | 0000-063-057 | 1 | |
| 59 | RUBBER CUSHION | PBE13360 | 0000-063-059 | 3 | |
| 60 | SD SCREW | PBE13913 | 0000-063-060 | 3 | |
| 61 | C, SPRING | PBE6097 | 0000-063-061 | 1 | |
| 62 | AS CAM | PBD1660 | 0000-063-062 | 1 | |
| 64 | REW SPRING | PBE6057 | 0000-063-064 | 1 | |
| 65 | START LEVER | PBE14945 | 0000-063-065 | 1 | |
| 66 | ASSIST GEAR B | PBD1648 | 0000-063-066 | 1 | |
| 67 | SPRING | PBE6170 | 0000-063-067 | 1 | |
| 68 | EJECT SUB PLATE | PBE14941 | 0000-063-068 | 1 | |
| 69 | SPRING | PBE6160 | 0000-063-069 | 1 | |
| 70 | SENDER | PBD1645 | 0000-063-070 | 1 | |
| 71 | ASSIST GEAR A | PBD14946 | 0000-063-071 | 1 | |
| 72 | ASSIST GEAR A | PBD1647 | 0000-063-072 | 1 | |
| 73 | START LEVER C | PBE14958 | 0000-063-073 | 1 | |
| 74 | SENDER ARM | PBE14992 | 0000-063-074 | 1 | |
| 75 | SPRING | PBE6177 | 0000-063-075 | 1 | |
| 76 | TENSION ASSY | PBE01593 | 0000-063-076 | 1 | |
| 77 | SPRING | PBE6164 | 0000-063-077 | 1 | |
| 78 | SPRING | PBE6197 | 0000-063-078 | 1 | |
| 79 | CHANGE PLATE A ASSY | PBE02024 | 0000-063-079 | 1 | |
| 80 | SPRING | PBE6166 | 0000-063-080 | 1 | |
| 81 | CHANGE PLATE B | PBE14936 | 0000-063-081 | 1 | |
| 82 | T, SPRING | PBE6155 | 0000-063-082 | 1 | |
| 83 | T, SPRING | PBE6154 | 0000-063-083 | 1 | |
| 91 | BELT | PBE5046 | 0000-063-091 | 1 | |
| 92 | FLYWHEEL | PBE14948 | 0000-063-092 | 1 | |
| 93 | BELT | PBE5044 | 0000-063-093 | 1 | |
| 94 | FLYWHEEL GEAR | PBE14944 | 0000-063-094 | 1 | |
| 95 | C, SPRING | PBE6168 | 0000-063-095 | 1 | |
| 96 | SPRING | PBE6175 | 0000-063-096 | 1 | |
| 97 | T, SPRING | PBE6102 | 0000-063-097 | 1 | |
| 98 | T, SPRING | PBE6124 | 0000-063-098 | 2 | |
| 99 | CAM PLATE | PBD1658 | 0000-063-099 | 1 | |
| 100 | LEVER HOLDER | PBD1646 | 0000-063-100 | 1 | |
| 101 | INTER PLATE | PBD1723 | 0000-063-101 | 1 | |
| 102 | LOCK PLATE, A | PBD1655 | 0000-063-102 | 1 | |

| SYMBOL NO. | DESCRIPTION | SPECIFICATION | CODE NO. | Q'TY | REMARK |
|------------|--------------------|---------------|--------------|------|--------|
| 105 | PAUSE PLATE SPRING | PBE14954 | 0000-063-105 | 1 | |
| 106 | LOCK PIN | PBE14982 | 0000-063-106 | 1 | |
| 107 | PAUSE LEVER | PBD1726 | 0000-063-107 | 1 | |
| 108 | STOP LEVER | PBD1727 | 0000-063-108 | 1 | |
| 109 | F. F LEVER | PBD1728 | 0000-063-109 | 1 | |
| 110 | REW LEVER | PBD1729 | 0000-063-110 | 1 | |
| 111 | PLAY LEVER | PBD1730 | 0000-063-111 | 1 | |
| 112 | REC LEVER | PBD1731 | 0000-063-112 | 1 | |
| 113 | START LEVER A | PBE14942 | 0000-063-113 | 1 | |
| 114 | SPRING | PBE6171 | 0000-063-114 | 1 | |
| 115 | ERING | PGRE40A | 0000-063-115 | 1 | |
| 201 | SCREW (HEAD) | PGSN20A2011 | 0000-063-201 | 4 | |
| 202 | F, TAP-SCREW | PGST15A2608 | 0000-063-202 | 3 | |
| 203 | DT SCREW | PGSD10A2610 | 0000-063-203 | 1 | |
| 204 | DT SCREW | PGSD10A2605 | 0000-063-204 | 8 | |
| 205 | DT SCREW | PGSD10A2010 | 0000-063-205 | 1 | |
| 206 | DT SCREW | PGSD10A2630 | 0000-063-206 | 1 | |
| 207 | F, TAP SCREW | PGST15A2606 | 0000-063-207 | 2 | |
| 209 | WASHER | PGWM26x060020 | 0000-063-209 | 1 | |
| 210 | E, RING | PGRE25A | 0000-063-210 | 1 | |
| 211 | WASHER | PGWP21x080013 | 0000-063-211 | 1 | |
| 212 | DT SCREW | PGSD10A2608 | 0000-063-212 | 2 | |
| 213 | CS RING | PGRS509 | 0000-063-213 | 1 | |
| 214 | SCREW | PBE14984 | 0000-063-214 | 1 | |
| 215 | WASHER | PGWM21x070030 | 0000-063-215 | 1 | |